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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,824	09/12/2003	Noriyoshi Chizawa	CANO:085	7719

7590
ROSSI & ASSOCIATES
P.O. Box 826
Ashburn, VA 20146-0826

01/04/2008

EXAMINER

QIN, YIXING

ART UNIT	PAPER NUMBER
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2625

MAIL DATE	DELIVERY MODE
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01/04/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/661,824

Applicant(s)

CHIZAWA ET AL.

Examiner

Yixing Qin

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/19/06, 10/06/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The claimed invention in claims 8-14 are directed to non-statutory subject matter.

Claims 8-14 are rejected under 35 U.S.C. 101 because they are directed towards an abstract idea. Under the current 101 guidelines (specifically, page 30 "Annex I"), there are three 101 judicial exceptions – law of nature, natural phenomenon, and abstract idea. A program is simply a set of instructions and does not produce a physical transformation or a tangible result. The suggested correction is to amend the claims to begin with "A computer-readable medium encoding a control program containing instructions for:"

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 8-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Shishido (U.S. Patent No. 6,376,854).

Regarding claims 1, 8, Shishido discloses an image reading apparatus, comprising:

an image reading device capable of reading image data of a reference member;
(Fig. 1 item 30 is a electron beam used for scanning)

a random noise suppressing device that suppresses random noise components in the image data of the reference member read by said image reading device; (Column 18, lines 10-29) and

a detecting device that detects abnormality on the reference member based on the image data having random noise components suppressed by said random noise suppressing device. (column 2, lines 42-48, images are compared to obtain defects)

Regarding claims 2, 9, Shishido discloses wherein said random noise suppressing device suppresses random noise components by averaging the read image data of the reference member. (column 18, lines 10-29. This process used can be considered averaging pixel data of the read image)

Regarding claims 3, 10, Shishido discloses wherein said random noise suppressing device suppresses random noise components by carrying out an

interpolation process on the read image data of the reference member. (column 22, lines 40-54)

Regarding claims 4, 11, Shishido discloses wherein said random noise suppressing device comprises a delay device that delays the read image data of the reference member (column 10, line 60 – column 11, line 30) , and an interpolation device that carries out the interpolation process on the read image data of the reference member and the image data delayed by said delay device. (column 12, line 54 – column 13, line 10)

Regarding claims 5, 12, Shishido discloses further comprising a shading correction device that carries out a shading correction based on the read image data of the reference member (column 9, lines 41-44 discloses that the shading amendment circuit is part of a processing circuit, indicating that the shading is done prior to other corrections, see in Fig. 1 that the preprocessing unit is one of the first places the image data get sent to) , and wherein said random noise suppressing device suppresses random noise components in the image data on which the shading correction has been carried out by said shading correction device. (column 18, lines 10-29 discloses that defect judging occurs after a noise elimination process. In Fig. 1, item 50, looking at the figure, occurs later than the preprocessing in item 40)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 7, 13, 14 rejected under 35 U.S.C. 103(a) as being unpatentable over Shishido (U.S. Patent No. 6,376,854).

Regarding claims 6, 11, Shishido discloses in Fig. 12 that the shading correction is part of a preprocessing section.

It does not explicitly disclose "further comprising a shading correction device that carries out a shading correction based on the image data having random noise components suppressed by said random noise suppressing device, and wherein said detection device detects abnormality on the reference member based on the image data on which the shading correction has been carried out by said shading correction device."

However, since Shishido shows that all the various modules are available in their invention, so it would have been obvious for one of ordinary skill to have manipulated the ordering of the processing due to various constraints, such as if such processing is needed due to processing time, etc. In the abstract Shishido also discloses that the detecting of defects occurs after an image is filtered (i.e. processed using shading, noise correction, etc.)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have done a shading operation after the noise processing.

The motivation would have been to perform only necessary functions when it is determined that an images needs to be further processed.

Therefore, it would have been obvious to alter Shishido to obtain the invention as specified.

Regarding claims 7, 12, Shishido discloses an image reading apparatus according to claim 1, wherein said random noise suppressing device operates only when abnormality is to be detected on the reference member by said detection device. (Shishido does not explicitly discloses that the noise suppressing only operates when abnormality is to be detected. However, the purpose o the Shishido invention is to detect defects in an reference item, so one can interpret this conditional claim to be true in Shishido because, in order to work properly to detect defects, a noise suppressing operation would be needed. Thus, it would have been at least obvious that the noise suppressing device operates when the defect detections is to occur)

Conclusion

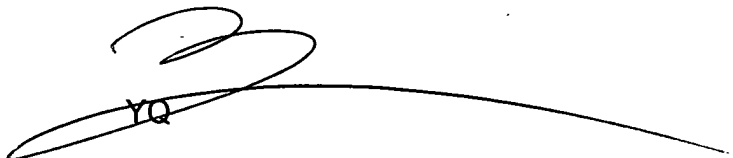
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yixing Qin whose telephone number is (571)272-7381. The examiner can normally be reached on M-F 9:30-6:00.

Application/Control Number:
10/661,824
Art Unit: 2625

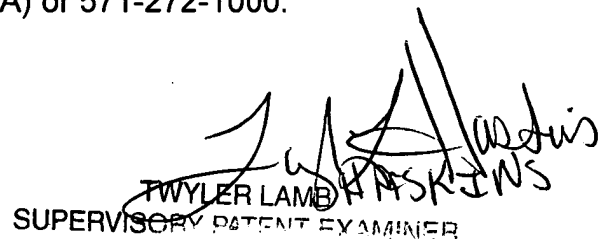
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Lamb can be reached on (571)272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



YQ



TWYLER LAMB
SUPERVISORY PATENT EXAMINER